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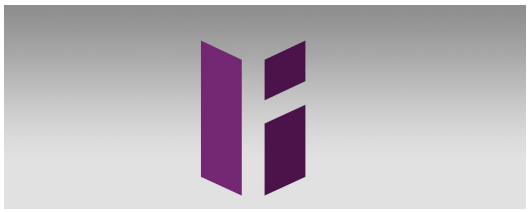

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ARISTOTLE ON THE COMMON SENSE

PAVEL GREGORIC

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For Marta, Mia, and Maks

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Preface

It is customary to preface one's work on the so-called 'common sense' in Aristotle with the warning that it has nothing to do with our notion of 'plain common sense'. Although opportune, this warning calls for an explanation. Common sense, as we understand it, seems to be a very basic ability of rational beings to follow their experience in discerning some obvious things, making elementary connections among them, and avoiding patent contradictions. Because this ability is so basic, it is shared by all rational beings, and that is why it is called 'common'. On the other hand, it is called 'sense' because it is developed naturally and because its operations are intuitive, not because it is a perceptual ability properly speaking.

In the context of Aristotle's psychology, the expression 'common sense' refers to a distinct perceptual capacity in which the five senses are integrated. It is called 'common' because it is shared by the five senses, and it is called a 'sense' because it is indeed a perceptual ability properly speaking. And because it is a perceptual ability, rather than a rational ability, it is shared by all animals, non-rational and rational alike. Obviously, what Aristotle calls the 'common sense' is very different from what we call 'common sense'.

It is a linguistic coincidence that these two very different notions have the same name. The Aristotelian expression *κοινὴ αἴσθησις* is translated, quite literally, as *sensus communis* in Latin and as 'common sense' in English. Here the Latin *sensus* and the English 'sense' are used in their primary connotation of a perceptual ability strictly speaking. However, in the current use of the expression 'common sense', the English word 'sense' has a wider connotation which goes far beyond the sphere of perceptual abilities. This wider connotation is found in the Latin word *sensus*, and those modern European languages that took over the Latin word—such as English, French, or Italian—adopted the wider connotation with it. The Greek word *αἴσθησις*, by contrast, does not permit this wider connotation, and that is why the Greek expression *κοινὴ αἴσθησις* never refers to the same thing to which the corresponding English expression refers nowadays.

That is not to say, however, that what we call 'common sense' is a modern invention. The Latin classical writers, such as Cicero, Horace,

and Seneca, used the expression *sensus communis* in a way reminiscent of our notion of common sense. Moreover, our notion of common sense has been traced back to Greek philosophers, especially the Stoics, and the germs of that notion have been found in Aristotle himself. However, the Greek origins of our notion of common sense will vainly be sought under the heading of κοινὴ αἴσθησις in ancient Greek philosophy.

Apart from attempts to trace our notion of common sense back to Aristotle, in the literature one will find the general claim that Aristotle is a philosopher of common sense. I find that claim plausible because it seems to me, to put it in a nutshell, that Aristotle sought to preserve as many beliefs warranted by experience as his subject-matter permitted. This is brought out by Aristotle's memorable methodological remark in the *Generation of Animals*: 'Such appears to be the truth about the generation of bees, judging from theory and from what are believed to be the facts about them; the facts, however, have not yet been sufficiently grasped; if ever they are, then credit must be given rather to observation than to theories, and to theories only if what they affirm agrees with the observed facts.'[1] Why, and to what extent, Aristotle is a philosopher of common sense would make an excellent topic for a book. However, that is not the topic of this book. This book is dedicated to *Aristotle's* notion of the common sense, not ours.

Such a book, I think, has long been due. The common sense is an important notion in Aristotle's psychology and one of his most enduring contributions to the history of psychology. Yet Aristotle says precious little about it, and what he does say is unsystematic and often ambiguous. It is little wonder, then, that scholars from antiquity to the present day have been in disagreement about the exact content of this notion. To get a firm grip on Aristotle's notion of the common sense, one needs to understand the wider framework in which it is embedded and to analyse painstakingly a dozen or so passages from Aristotle, many of which are unusually dense and textually problematic. Such an undertaking requires no less than a book-length study.

I hope that this book will fill the gap. It is a thoroughly revised text of my doctoral dissertation submitted to the University of Oxford in 2003. Without my supervisor, Michael Frede, the book would not have been written. He insisted that I stick with the topic of my BPhil. thesis, and he guided my work with scholarly rigour and philosophical acumen

[1] *GA* III.10 $760^{b}27–33$, trans. A. Platt.

for which I can find no parallel. I flatter myself that in the course of my BPhil. and DPhil. studies in Oxford Michael had taught me 'how to go about things in philosophy', to use an expression of his, and I shall always be grateful to him.

The dissertation was examined by David Charles and David Sedley. Apart from their joint report which contained many valuable observations and criticisms, I received an additional five pages of detailed comments from David Sedley that proved particularly useful in the process of revising. The dissertation was subsequently read by Myles Burnyeat and Péter Lautner. I had the benefit of their incisive oral and written comments respectively, which led to further improvements. Myles was also kind enough to read and comment on the penultimate version of Part III, Chapters 3 and 4, which may be regarded as central. Two anonymous readers for Oxford University Press gave me a number of useful suggestions in point of content and structure. I also owe a word of gratitude to the colleagues who read and commented on parts of the revised manuscript: Ursula Coope, Filip Grgić, James Harris, and Thomas Johansen. Having mentioned Filip Grgić, with whom I have closely collaborated on several projects, I wish to add that without him my professional life in Zagreb would be greatly impoverished, so I feel very much in his debt. Thanks also to Luka Boršić for sharing his knowledge of Greek and Latin with me. Of course, none of the individuals here mentioned should be held responsible for any fault that this book contains.

In the winter semester of the academic year 2005–6 I held a Junior Research Fellowship at Central European University in Budapest. The fellowship relieved me of my teaching duties in Zagreb and enabled me to dedicate myself to the final stages of revising. I am thankful to the Special Project Office and the Department of Philosophy of CEU for the fellowship and flexibility in arranging it to suit my needs. A special thanks goes to István Bodnár, who read the whole of the revised manuscript and saved me from a number of blunders, some innocuous and some substantial. I presented a paper based on Part I of the book before a well-informed audience at CEU, and I profited from the lively discussion that followed.

Finally, I would like to thank my family, in particular my parents, Tanja Kolar-Gregorić and Goran Gregorić, for their support and encouragement over the years. The people whose presence meant most to me in the course of preparing this book were those who suffered most from my absence due to long working-hours. It is to them,

my wife Marta and my daughter Mia, that I dedicate this book with all my love. Maks was fortunate enough to be born after the book had been written. In fact, expectation of his birth hastened the final stages of writing; that alone would have secured him a place in the dedication.

P. G.

Zagreb
November 2006

Contents

Abbreviations

The following abbreviations are used in this book:

Cat.	*Categoriae*
APr.	*Analytica Priora*
APo.	*Analytica Posteriora*
Top.	*Topica*
Phy.	*Physica*
Cael.	*De Caelo*
GC	*De Generatione et Corruptione*
Mete.	*Meteorologica*
DA	*De Anima*
PN	*Parva Naturalia*
DS	*De Sensu et Sensibilibus*
DM	*De Memoria et Reminiscentia*
DSV	*De Somno et Vigilia*
DI	*De Insomniis*
DDS	*De Divinatione per Somnum*
DLBV	*De Longitudine et Brevitate Vitae*
DJS	*De Juventute et Senectute, de Vita et Morte*
DR	*De Respiratione*
HA	*Historia Animalium*
PA	*De Partibus Animalium*
MA	*De Motu Animalium*
IA	*De Incessu Animalium*
GA	*De Generatione Animalium*
Met.	*Metaphysica*
EN	*Ethica Nicomachea*
EE	*Ethica Eudemia*
Pol.	*Politica*
Rhet.	*Ars Rhetorica*
Prot.	*Protrepticus*

References to Aristotle's works are given in the following form: abbreviated title, book (if available), chapter, followed by page, column, and lines in Bekker's edition; e.g. *DA* I.1 $402^{a}1–4$, *DSV* 1 $454^{b}31–^{a}3$.

References to other works, ancient and modern, aim to be as short as possible, and they have the following format: author's name, followed by parentheses containing the year of publication, page, and lines (if available); e.g. Alexander (1887: 64.1–5), Kahn (1966: 60), Brunschwig (1996: 218). References to ancient works of disputed authorship are given according to their traditional attributions in standard editions, e.g. Philoponus (1887: 460.17–19), Simplicius (1882: 185.7–20). Introductions, notes, and commentaries by editors and translators of Aristotle's texts are cited by the editor's or translator's name followed by 'ed.' in parentheses, e.g. Ross ((ed.)1961: 33), Hamlyn ((ed.)1968: 102). Details of all cited works can be found in the Bibliography, which is organized so as to facilitate following up of references; notably, the list of editions and translations of Aristotle's works is ordered alphabetically by names of the editors and translators.

All translations are mine unless otherwise stated. Many of my translations derive, sometimes with minimal modifications, from those already published. Translations of the textually most problematic passages are accompanied by the Greek text in the Appendix. The Greek text is furnished with a selective apparatus for the reader's convenience. The apparatus is compiled from various modern editions and makes no claim to comprehensiveness.

Introduction

Imagine what it would be like if your five senses—sight, hearing, smell, taste, and touch—were completely independent from one another. You would not be a creature that wakes or sleeps, because your senses would not all be operating in the state of waking and all be resting in the state of sleep. Rather, each sense would operate for some time and then take a snooze, so that you would spend a greater part of your life in an erratic state, neither fully awake nor entirely asleep. Moreover, you would not be able to tell that a piece of Camembert cheese is white and smelly, because you would have no means of relating what you see to what you smell. Each sense would create a phenomenal world of its own, and there would be nothing to mesh these worlds. What is worse, if you lived long enough with your senses cut off from one another, there would not be a 'you' in the first place, because each sense would have its own subject of experience, oblivious of the others. Your body would be housing five yous, a visual you, an auditory you, an olfactory you, and so forth.

Should your perceptual abilities be accompanied by other capacities, such as imagination and memory, these capacities would be bereft of their unity. The visual you would have only visual images and visual memories, the auditory you would have only auditory images and auditory memories, and so forth. Each you would be enriched only within its own narrow confines, locked away from the other yous. Should your perceptions give rise to desires, they would be distributed among the subjects of different senses. The visual you might find a piece of Camembert cheese pleasant and tell your body to take it, while the olfactory you would find it unpleasant and tell your body to shun it. Thus action would be seriously impeded, in some cases impossible. Your body simply would not be able to serve all yous at once, and there would be no means of reaching an agreement as to which you is going to use the body at what time. In fact, it seems that no you would ever know of the existence of the other yous housed in the same body.

This dire scenario does not come from a best-selling book by Oliver Sacks. Rather, it is developed from a suggestion made by Plato in his dialogue *Theaetetus*, almost two-and-a-half millennia ago. Fortunately, the suggestion was followed by Plato's proposal how to avoid the scenario. I suppose many readers would find his proposal congenial, since it consists of postulating a conscious subject which uses the senses and thinks about their reports. Aristotle proposed to avoid this scenario differently, by postulating a perceptual power over and above the five senses which monitors their states and co-ordinates their reports. This perceptual power is known as the 'common sense' (κοινὴ αἴσθησις, *sensus communis*), and it is the topic of this book. To see why Aristotle decided to avoid the described scenario in this particular way, rather than in the way proposed by his master, let us take a closer look at Plato's *Theaetetus*.

In this dialogue Socrates looks for a definition of knowledge with a talented young mathematician called Theaetetus. The first and longest part of the dialogue is devoted to Theaetetus' first reply that knowledge is perception. In order to show that perception cannot amount to knowledge, towards the end of the first part of the dialogue Plato gives an account of the senses. The aim of his account is to reduce perception to passive reception of basic sensible qualities (e.g. white, salty, hot) by means of the senses. This in turn results in an expansion of the active process in which the so-called 'common features' (τὰ κοινά) are grasped. These are the features that characterize, among other things, different basic sensible qualities, and they include 'being', 'difference', 'sameness', 'likeness', and 'unlikeness'. Plato insists that the soul engages in this active process by means of its own resources, unaided by the senses and the bodily parts in which the senses reside. Since knowledge requires a grasp of the common features, knowledge can only be found in this activity in which the soul engages by its own means. Hence, not only can knowledge not be identified with perception, but no case of perception as such can ever constitute a case of knowledge.

So there are two essentially different cognitive processes, according to Plato. Perception is the passive process of grasping a limited number of features, namely basic sensible qualities. The grasp of one kind of basic sensible quality is achieved by means of one sense only, and this grasp is available to human beings as well as to other animals from their birth. By contrast, there is the activity of grasping an entirely different sort of feature, namely the common features. This is achieved by the soul's own means, without any reliance on the senses, and it requires

development through experience and education. It seems that Plato conceives of this latter activity as some sort of thinking.[1]

It is important to note Plato's insistence that the subject of both of these kinds of cognitive process is one and the same. More precisely, Plato thinks that it is the soul that does both of them, only by different means. It perceives by means of certain bodily parts, namely the sense organs, whereas it thinks by means of its own resources. Myles Burnyeat rightly acclaims this as 'the first unambiguous statement in the history of philosophy of the difficult but undoubtedly important idea of the unity of consciousness'.[2]

Let us now look more closely at the first part of Plato's argument, the part in which he establishes the soul as the proper subject of perceiving, as opposed to the sense organs. At 184c5 and following, Plato's Socrates asks Theaetetus whether it is more correct to say that we see with (τῷ) the eyes, or by means of (διὰ τοῦ) the eyes. This grammatical contrast points to a philosophical contrast between two importantly different views of the subject of perception. To say that we see *with* the eyes is to say that it is our eyes that do the seeing. To say that we see *by means of* the eyes is to say that we, or our soul, use the eyes as the instrument of seeing. Theaetetus decides that it is more correct to say that we perceive by means of the eyes, and Socrates commends his answer:

> Indeed, young man, for it would surely be strange if several different senses were sitting in us as in wooden horses, rather than there being some one form, the soul or whatever one ought to call it, in which all those converged and with which we perceive perceptible things by means of those as instruments. (*Theaetetus* 184d1–5)

There are several unclear details in this short passage, but the following is beyond doubt. The idiom of seeing with the eyes implies the unacceptable situation metaphorically described as 'the senses sitting in us as in wooden horses'. The tacit assumption seems to be that the senses are localized in different parts of the body, namely the sense organs.[3] If perception were achieved by each sense organ individually,

[1] I infer that the activity of grasping the common features is a sort of thinking from the vocabulary of διανοεῖν (185a4, 9, b7), ἀναλογίζεσθαι (186a10, c3), and συλλογισμός (186d3). At 187a2–8 Theaetetus proposes to call this process δοξάζειν, forming of judgement or opinion.

[2] Burnyeat (1990: 58).

[3] For instance, at 185c3 Plato speaks of the sense of taste as 'the capacity by means of the tongue' (ἡ διὰ τῆς γλώττης δύναμις).

the implication would be that the spatially separate senses, each being localized in a different part of the body, would remain also functionally separate. Each sense would do its own work with respect to one kind of basic sensible quality, and there would be nothing to use the senses. The preferred idiom of seeing by means of the eyes, on the other hand, suggests that there is some one thing—Plato proposes to call it 'soul'—in which the senses are integrated.[4] And because they are integrated in the soul, they can be used to perceive whatever is there to be perceived, to compare or discriminate perceived things, and so forth.

How should we understand the metaphor of the senses sitting in us as in wooden horses? The later scholiast on this passage, Arethas of Caesarea (tenth century AD), suggests that Plato had in mind the Trojan horse in the trunk of which the Achaeans hid their best warriors in order to sneak them into the besieged city.[5] This interpretation is accepted by several commentators, and it is very attractive. However, while agreeing that the wooden horse in which the senses are sitting is the Trojan horse, and hence that Plato likens the senses to the men ensconced inside the Trojan horse, further exegesis is needed.

The metaphor can be interpreted as conveying three closely related yet distinct ideas. First, it conveys the idea of the autonomy of each sense. In the depicted situation, each sense minds its own business within the realm of one kind of basic sensible quality, without any co-ordination with the other senses. Second, the metaphor conveys the idea of something that contains the senses, but cannot use them. In the depicted situation the senses are found within something unconscious, like the wooden trunk of the Trojan horse. The wooden horse is just a container in which the senses sit, not the sort of thing that could make use of the senses. Third, even if the wooden horse could make use of the senses, that would be of no avail, since the wooden horse is not the sort of thing that takes nourishment, perceives objects, desires them, and moves accordingly. Having the senses and being able to use them is just one part of what it is to be a certain sort of thing, namely an animal,

[4] What Plato proposes to call the 'soul' (*ψυχή*) in *Theaetetus* 184d3 may correspond to what he calls the *φρόνιμον* in *Timaeus* 64b5, as Lautner (2005: 250–1) suggests. If we assume with Lautner that the *φρόνιμον*, to which bodily affections have to be transmitted in order to be perceived, is or belongs to the rational part of the soul, then the picture of the integration of the senses in the *Timaeus* conforms to the picture we find in the *Theaetetus*.

[5] See the scholium on *Theaetetus* 184d (*Scholia Platonica*, 440–1 Greene).

which includes having various other capacities and a suitable body in which these capacities are realized. Clearly, the wooden horse is no such thing.

All three unacceptable consequences of the situation depicted in the metaphor go against our experience of perceiving, and they are circumvented by the alternative implied in the idiom of seeing by means of the eyes. To perceive by means of the eyes suggests that there is a subject that uses the sense of sight localized in the eyes. Indeed, it is the same subject that uses all the other senses, each couched in a different part of the body. Plato calls this subject 'soul', and he says that the senses, each located in one sense organ, stretch from there and converge (*συντείνειν*) in the soul. By converging in the soul, which is taken to be something conscious and active, the senses are integrated. And because they are integrated in the soul, they can be used by it.

The soul uses the senses primarily in such a way as to receive impressions of the basic sensible qualities. That is precisely what it means to perceive (*αἰσθάνεσθαι*) in Plato's theory. However, the soul also operates 'itself by itself', in addition to using the senses to perceive. For instance, the soul applies common features such as 'sameness' and 'difference' to the impressions received through the senses and thus discriminates them. When the soul applies the common features to impressions received by means of the senses, the soul is not just perceiving, but also thinking about what it perceives. What I am getting at is that co-ordination of the senses seems to involve the active process of thinking—or whatever it is that the soul does when it operates 'itself by itself'—and this process is essentially different from perceiving, the passive process of receiving basic sensible qualities. To put it differently, in Plato's view the senses are not integrated at the level of perception, but at the level of thought. Thus it is not unfair to say that Plato expands the scope of thought at the expense of perception in his project of dissociating knowledge from perception.

Now Aristotle's discussion of perception belongs to a different project, with different premisses and aims. Speaking very generally, Aristotle's project is to give a systematic account of animals. Such an account ought to explain, among other things, the behaviour of animals which is often stunningly complex. This can be explained within Plato's framework—provided one is prepared to attribute some level of thought

to non-human animals. Plato seems to be prepared to do so,[6] but not Aristotle. One of his fundamental premisses is that non-human animals *cannot* think or form opinions.[7] If non-human animals cannot think or form opinions, it would be difficult to adhere to Plato's framework and explain how they can survive, let alone behave intelligently. Their survival depends on their ability to find food, for instance, and finding food depends on their ability to pick out something warm, soft, and moist from the environment which is cold, hard, and dry. This ability in turn depends, at least partly, on the ability to differentiate these sensible qualities, and this latter ability is construed by Plato in terms of the soul applying the common features 'same' and 'different' to these sensible qualities, and that is some sort of thinking.

Aristotle's project thus requires a different, we might say less anthropocentric, notion of the soul which can explain behaviour of animals without recourse to thought. This urges Aristotle to do exactly the opposite of what Plato has done, namely to expand the scope of perception at the expense of thought. That is to say, what is required for Aristotle's project is a notion of the soul in which co-ordination of the senses does not involve thinking, but is achieved entirely at the level of perception. For this purpose, and in line with the basic premisses of his philosophy, Aristotle proposes a significantly different picture of the soul and its relation to the senses.

Despite the fundamental disagreement between Plato and Aristotle due to their different philosophical projects, there can be little doubt that Aristotle was impressed by the metaphor of the wooden horse. He must have thought that a satisfactory theory of perception should avoid the consequences implied in the situation depicted by the metaphor. He agreed with Plato that the senses must be integrated in some single thing, and that this allows them to be used in various ways. He disagreed, however, about the nature and power of that which integrates the senses, and consequently, about the way the senses are co-ordinated. In Aristotle's theory, the senses are not integrated at the level of something that is the subject of both perceiving and thinking. Rather, the senses are integrated by the common sense. Thus integrated, co-ordination of the senses is achieved perceptually, and it can be attributed to non-rational

[6] See *Timaeus* 41d4–42e4 and 90e1–92c3, *Phaedo* 81b1–82b8, *Phaedrus* 249b1–5, *Republic* X 619e6–620d5, *Laws* XII 961d1–10, *Statesman* 263d3–8; cf. Diogenes Laertius III.15.

[7] The far-reaching consequences of this premiss have been rightly emphasized by Sorabji (1992: 196; 1993: 7–20).

animals. With his notion of the common sense, then, Aristotle avoids not only the unpalatable situation depicted by the metaphor of the wooden horse, but also the particular way Plato has dealt with it, which is incompatible with Aristotle's project and fundamental assumptions.

Both philosophers had some ideas about the physiological basis of the integration of the senses, and it is very likely that in developing these ideas they relied on ancient medical theories which postulated a central organ of awareness. There had been an intense and long-lasting debate among physicians as to which organ that was. However, they agreed that the central organ is connected with the rest of the body through a network of channels, and that the substances running through the channels carried perceptual impulses from the periphery to the central organ. Various mental occurrences, especially disturbances and pathological conditions, were explained with reference to the state of the central organ. It is usually assumed by historians of ancient medicine that theories associated with the medical schools of Cnidus and Sicily maintained that the heart was the central organ of awareness, and that they assigned a prominent role to blood. Adherents of the medical school which flourished on the island of Cos, by contrast, took the view that the brain was the seat of awareness, and they emphasized the role of air.[8]

Plato's ideas were stated in his monumental dialogue *Timaeus*, where he leans towards the views of the Coan school. Plato located the rational soul, which seems to be the subject of sensory experience, in the head, and he attached special importance to the marrow of which the brain is made. Aristotle, by contrast, sided with the other school and located the common sense in the heart. One of the main reasons for Aristotle's choice of organ was his conviction, supported by his empirical research, that the heart is connected in one way or another with all the sense organs, whereas the brain is not. Hence, he thought that the heart is the central or master sense organ, and the seat of the common sense. Another reason, also based on Aristotle's empirical research, is his view

[8] The cardiocentric view is manifest in some Hippocratic writings, most notably *On Diseases, On Places in Man*, and *On the Heart*. It has been endorsed by Aristotle, Diocles of Carystus, Praxagoras of Cos, and the Stoics. The encephalocentric view is found in the Hippocratic *On the Sacred Disease* and *On the Nature of Man*, and some version of it has been advocated by Alcmaeon of Croton, Philolaus, Diogenes of Apollonia, possibly by Anaxagoras and Democritus, by Plato in the *Timaeus*, and the Peripatetic Strato of Lampsacus. The discovery of the nervous system by Alexandrian doctors in the early 3rd century BC gave support to the latter view, which won the day by late antiquity. For a selection from the vast literature on this subject, see Van der Eijk (2005: 124 n. 13).

that the heart is connected in one way or another with all the other vital activities, whereas the brain is not. The heart is where the crucial stage of the nutritive process takes place, namely the production of blood, where desires and aversions arise, and where impulses to locomotion come from. Hence, Aristotle thought of the heart as the central or master organ *toto caelo*, very much like we think of the brain.

We know that Aristotle got his physiology all wrong. There is a complex nervous system with a number of hierarchically organized perceptual sub-systems integrated in the brain. Moreover, we think that integration of the senses must be a part of a larger story—a story of consciousness—which ought to explain not only the integration of the senses but of all our cognitive, emotional, and conative abilities. Finally, we do not think that the senses are integrated by another sense. To be sure, some philosophers, such as Kant or Armstrong, would be prepared to argue that the senses, together with the other mental abilities, are integrated by an 'inner sense', but that is only a figure of speech, not a 'sense' properly speaking. Given our knowledge of neurophysiology and our intuitions about consciousness, it is natural to raise the question why we should study the Aristotelian notion of the common sense. I have three reasons to offer.

First, this notion is philosophically interesting. Some scholars have found in it rudiments of a theory of consciousness.[9] I would say, more cautiously, that it can be fruitfully related to several facets of current discussions about consciousness.[10] One set of current discussions is devoted to perceptual consciousness, which is mainly awareness of what is going on in one's environment by means of the five senses. It is often claimed that one of the central features of perceptual consciousness is its unity. Of course, there are various ways in which perceptual consciousness is unified, and not all of them are addressed by Aristotle. However, some ways are addressed, and they are addressed with the notion of the common sense. For instance, one way in which perceptual consciousness is unified is that it enables integration of sensible properties accessed through different sense modalities into coherent wholes, for example when we perceive white and sweet as

[9] Kahn (1966), Modrak (1981*a*; 1987: 133–54); cf. Hardie (1976), Caston (2002).

[10] It seems to me that there is very little or nothing in Aristotle that can be plausibly related to the so-called 'phenomenal consciousness' and 'access consciousness' (introduced by Block 1995) which are at the centre of current discussions of consciousness in the philosophy of mind; cf. Caston (2002) and Johansen (2006).

bound together, as different properties of the same object. We shall see that Aristotle recognizes the importance of this phenomenon and that he gives it an interesting explanation which relies on a particular notion of simultaneity.

On the other hand, Aristotle addresses some issues that are on the periphery of modern research on the unity of perceptual consciousness. For instance, perceptual consciousness is unified in such a way that it is not disrupted by occasional incapacitation of one or more senses, but by periodical incapacitation of all the senses in sleep. Aristotle's notion of the common sense is introduced to explain, among other things, why that is so.

Another set of current discussions is devoted to consciousness understood as awareness of what is going on in one's mind. There is a long and distinguished tradition of philosophers, from Locke and Kant to Armstrong and Lycan, who argue that we are aware of what is going on in our minds in a way which resembles the way we are aware of what is going on in our environment, that is, by some sort of perception. Hence they take consciousness to be a matter of reflection, inner sense, monitoring, or second-order perception of our own mental states and activities. Aristotle's notion of the common sense seems to be a precursor of that tradition, since he argues that the awareness of our perceptual states is of perceptual sort, for it is achieved by a perceptual power, namely the common sense. Although the common sense provides us with access to our perceptual states only, thus capturing only a segment of the relevant notion of consciousness, what Aristotle has to say about this function of the common sense is, I think, rather stimulating. What follows from his account, for instance, is that awareness of our perceptual states should be regarded as an aspect, possibly the most important aspect, of the unity of perceptual consciousness. That is to say, part of what it is to have one's perceptual consciousness unified, according to Aristotle, is to be aware of one's perceptual states. I shall offer some thoughts as to why the awareness of one's perceptual states is important for an animal. Moreover, Aristotle observes that the common sense enables us to be aware not only of our perceptions of colours and sounds, but also of our failures to perceive, as when we find ourselves surrounded with darkness and silence. This observation, I shall argue, has far-reaching consequences which have gone unnoticed in recent discussions.

The second reason for studying Aristotle's notion of the common sense is its historical importance. To illustrate this, let me quote a

critical remark written in the mid-seventeenth century, almost two millennia after Aristotle: 'Some say the Senses receive the Species of things, and deliver them to the Common Sense; and the Common Sense delivers them over to the Fancy, and the Fancy to the Memory, and the Memory to the Judgement, like handling of things from one to another, with many words making nothing understood' (Thomas Hobbes, *Leviathan*, I.2.8). What Hobbes is criticizing in this passage is the medieval theory of the so-called 'internal senses'. Medieval philosophers argued that human beings share with higher animals a certain number of capacities, called 'internal senses', which are located in the three Galenic ventricles of the brain. There was some disagreement as to how many capacities there are and how they are arranged in the ventricles. All major medieval philosophers agreed, however, that one of these capacities is the 'common sense' and that it is located in the anterior ventricle of the brain, right where all the sensory nerves were believed to end up. The common sense receives perceptible forms (*species*) from the external senses, it compares the received forms, differentiates them, and unifies them. Thus processed, perceptible forms are passed on to the other internal senses.

The next internal sense is imagination. Imagination collects and manipulates the forms. Some medieval philosophers distinguished between imagination proper and fantasy as two distinct internal senses, with slightly different functions. Roughly speaking, imagination retains and collects the processed forms, whereas fantasy divides them and combines them into representations of things that were not perceived. Next, medieval philosophers recognized the existence of a capacity which enables the animal to extract vital information about its environment from the form processed by the common sense and imagination, and to perform intelligent actions on that basis, such as avoiding harmful things like predators, pursuing beneficial things like food and medicinal substances, making provisions of food, and building complex structures such as webs or nests. This capacity is called the 'cogitative' or 'estimative' capacity, and it was located in the middle ventricle of the brain. In all variants of the theory, the last capacity in the series, located in the posterior ventricle of the brain, is the capacity of storing the entirely processed perceptible forms, that is, memory.[11]

[11] Thomas Aquinas and John of Jandun recognized four internal senses: the common sense, imagination, *vis cogitativa*, and memory. Avicenna, followed by Robert Grosseteste, Albert the Great, and Roger Bacon, argued for five internal senses: the common sense,

This theory provided a complete description of animal cognition, but only a partial description of human cognition. The medieval philosophers believed that human beings are endowed also with reason which enables them to acquire, manipulate, and express concepts, as well as to extract universals from particulars and thus attain scientific understanding of things. Assuming that reason is not located in any bodily organ, they believed it to be immortal. Since the medieval philosophers baulked at overcrowding heaven with the souls of beasts, they needed a theory which explains complex behaviour of animals without recourse to reason. The theory of the internal senses satisfied the need in a robust way: it was cogent and logically consistent, and it was in agreement with both philosophical tradition and medical knowledge of the day. And apart from providing an account of cognition and behaviour of animals, it gave an account of non-rational cognitive abilities of human beings, it could explain failures of human cognitive functioning following head injuries and fevers, and it was often invoked in explanations of mental disorders and paranormal phenomena.

The father of modern anatomy, Andreas Vesalius, undermined the physiological basis of the theory of the internal senses by his detailed anatomical study of the human brain in the sixteenth century. He showed, among other things, that there is no direct connection between the anterior ventricle of the brain and any of the sensory nerves, and that the arrangement of ventricles is not as simple and clear-cut as the medieval descriptions suggested. However, the theory of the internal senses was far too deeply entrenched to be abandoned in the light of Vesalius's findings; rather, attempts were made to preserve the theory by providing it with a more suitable physiological basis.

In a letter to Mersenne of 21 April 1641, Descartes wrote: 'It is also certain that the seat of the common sense has to be very mobile in order to receive all impressions that arrive from the senses.'[12] Famously, Descartes located the seat of the common sense in the pineal gland. The renowned Oxford physician and anatomist Thomas Willis, whose lectures were attended by John Locke, argued that the sensory nerves are connected to the medulla oblongata, that the common sense is located

imagination, fantasy, *vis aestimativa*, and memory. A somewhat dated but still useful account of the chequered history of the internal senses in Latin, Arabic, and Hebrew medieval philosophy can be found in Wolfson (1935).

[12] *Oeuvres de Descartes*, III.362; cf. III.263 (Adam and Tannery).

in the adjacent corpus striatum, that images were projected on the neighbouring corpus callosum, and that in the end they are retained in the cortex, which is also the seat of the rational soul in human beings.[13]

It is unclear to me if, and to what extent, Hobbes's criticism of the theory of the internal senses was influenced by anatomical considerations. What is clear, however, is that his criticism was motivated by his conscious opposition to the medieval philosophical tradition. He refused to recognize the existence of immaterial entities such as perceptible forms, as suggested by the quoted passage. Instead, Hobbes advocated a materialist view of the world and proposed a unified mechanistic explanation of cognition and behaviour—of animals and humans alike—in terms of motions and inclinations. Descartes also rejected the medieval philosophical tradition and heralded mechanistic explanations as far as the physical world went. However, he still found use for the theory of the internal senses, as is illustrated by the following passage: 'But before I speak in greater detail about sleep and dreams, I ask you to consider what is most noteworthy about the brain during the time of waking: namely, how ideas of objects are formed in the place assigned to the imagination and to the common sense, how these ideas are retained in the memory, and how they cause the movement of all the bodily parts' (Descartes, *Treatise on Man*).[14] This passage clearly shows that the Aristotelian notion of the common sense has survived, at least in some form and for some time, even the wholesale rejection of the Aristotelian medieval tradition to which this notion had belonged. I want to stress this fact because it shows that the notion of the common sense, which originates with Aristotle, was one of the most successful and resilient of Aristotelian notions. As we have seen, throughout its history it has been bolstered by physiological considerations, but it was not dependent on them; it grew out of Aristotelian philosophy, but it did not hang upon it. The reason for abandoning this notion in the late seventeenth and eighteenth centuries was not that the problems it addressed were recognized as false or unimportant, but that they were

[13] Cf. Kemp and Fletcher (1993: 567), Bennet and Hacker (2003: 30–3), and Molnár (2004: 334). Willis was the first person to locate the rational faculties in the cerebral cortex. His view was based on comparative anatomical research which revealed that human beings have a proportionally larger cortex with a greater number of convolutions than other animals, and that persons suffering from congenital idiocy have a less developed cortex than healthy human beings.

[14] *Oeuvres de Descartes*, XI.174, trans. S. Gaukroger in Descartes (1998: 146). For other references to the common sense in Descartes, see *Oeuvres de Descartes*, XI.175–7 and 227, V.313, VIIIB.344 and 356–7, X.414.

addressed more convincingly and comprehensively within new theories of the mind and cognition, such as Locke's or Kant's.

The third reason for studying Aristotle's notion of the common sense is that, after centuries of interpretative efforts, it is still a subject of controversy. The divergence as to what the common sense in Aristotle is, what its functions are, and how they are discharged is so wide that one would be hard pressed to find two scholars who agree on all substantive points.

An attempt to summarize uncontroversial points concerning Aristotle's notion of the common sense yields a disappointingly short list. First, it is a perceptual power distinct from the five ordinary senses. Second, it is a perceptual power of a different type and order from the five senses. Third, it allows Aristotle to say that the five senses are not mutually independent capacities, but form some sort of unity. Fourth, it is closely connected with Aristotle's idea that the heart is the central sense organ. Fifth, it is in charge of certain functions that, in Aristotle's view, go beyond the five senses taken individually. Every further point or specification is likely to be controversial.

We would like to know how Aristotle arrives at his notion of the common sense, what sort of unity the senses form, and how this gives rise to a distinct perceptual power. Moreover, we would like to know what are the functions of this power, and exactly how they are discharged. A number of modern scholars have tackled these questions, sometimes with considerable plausibility and ingenuity, but rarely without controversy. Let me illustrate the intensity of the controversy by briefly surveying various suggestions of eminent scholars as to what the common sense is and what its functions are.

Sir David Ross gives the following account: 'The phrase *κοινὴ αἴσθησις* is rare in Aristotle, but conveniently sums up a whole mass of doctrine, provided it be interpreted not as being another sense over and above the five, but as the common nature inherent in them all. We must think of sense as a single faculty which discharges certain functions in virtue of its generic nature but is also specified into the five senses.'[15] It is far from clear what the 'common nature' inherent in all five senses is supposed to be, or what it means for something to discharge functions 'in virtue of its generic nature'. Ross does not explain this, and he hardly spells out the 'whole mass of doctrine' summed up in the phrase *κοινὴ αἴσθησις*. Charles Kahn criticizes Ross for giving 'a misleading account

[15] Ross ((ed.)1955: 35); cf. Ross ((ed.)1961: 33 and 1949: 140).

of the *sensus communis*'.[16] He thinks that the *De Anima* and *Parva Naturalia* form a continuous and progressive exposition of one single unified faculty of perception, and the failure to recognize this fact results in 'the concept of the *sensus communis* (which) is merely a truncated form of this Aristotelian doctrine of the unified faculty of perception'. On the other hand, Deborah Modrak claims that the common sense is 'simply the capacity for joint activity by the five senses'.[17] Stephen Everson retorts that the point about the common sense 'is not that it is possessed by the special senses *jointly*, but precisely that it is possessed in common by those senses and so it is not specific to any'.[18] He maintains that the common sense 'is something which each sense possesses but not *as that sense*: it is a capacity it has in virtue of being part of the perceptual capacity as a whole and not of being that particular sense.' Obviously, there is substantial disagreement among scholars as to what the common sense is.

Let us take a look at the functions that modern scholars ascribe to the common sense. Ross writes:

> The functions in which the perceptive faculty operates in this unspecialized way are the following: (1) the perception of the 'common sensibles'; (2) the perception of the 'incidental sensibles'; (3) the perception that we are perceiving; (4) discrimination between the objects of different senses. (5) Finally, Aristotle argues that the inactivity of all the senses which is found in sleep cannot be a mere coincidence but must be due to the inactivity of the central perceptive faculty of which they are differentiations.[19]

In contrast to Ross, Irving Block thinks that perception of the common sensibles—features perceived through more than one sense, such as shape, magnitude, or change—is the work of nothing other than the individual senses.[20] David Hamlyn, on the contrary, argues that the phrase 'common sense' names a specialized perceptual power whose one and only function is to perceive the common sensibles.[21] Kahn excludes function (2) from Ross's list on account of the fact that it 'belongs to the sense faculty only *incidentally*'.[22] However, he adds to Ross's list: (6) the sense of time; (7) the capacity for imagination; (8) the capacity for memory; and (9) the capacity for dreaming. Richard Sorabji provides

[16] Kahn (1966: 63).
[17] Modrak (1981*b*: 406; cf. 1987: 62–71).
[18] Everson (1997: 155 n. 26).
[19] Ross ((ed.)1955: 35); cf. Ross ((ed.)1961: 33–6 and 1949: 140–2).
[20] Block (1988: 244–5, 247–8 n. 10; cf. 1961*b*: 62).
[21] Hamlyn (1968: 204–6; (ed.)1968: 128–9).
[22] Kahn (1966: 64).

a list which agrees with Kahn's except that it expands it with another three functions: (10) perceiving simultaneously different sense objects; (11) perceiving that they belong to one thing; and (12) perceiving proper objects of one sense by another sense, for example perceiving sweet by sight.[23] Block adds yet another function to the common sense, and that is: (13) to objectify perceptions, that is, to give their contents objective reference.[24] This suffices to show how wide the disagreement concerning the functions of the common sense is among contemporary scholars.

The illustrated disagreements are generated by real difficulties in the subject-matter. I think that there are three main sources of difficulties surrounding Aristotle's notion of the common sense. First, the notion emerges from Aristotle's philosophical project and method, which are not only far removed from ours, but may inspire modern readers with disbelief. Second, Aristotle is rather inconsistent in his use of terminology, which complicates the matter greatly. Third, passages in which Aristotle explains the functions that belong to the common sense are often compressed and textually problematic, and as a result it is hard to make sense of them. The last two sources of difficulties frustrated ancient as well as modern interpreters, so they can be only of partial help in bring us closer to an understanding of Aristotle's notion of the common sense.

Dealing with these sources of difficulties in an appropriate way ought to remove at least the most acute difficulties and thus make Aristotle's notion of the common sense clearer. This is what I hope to achieve in this book. Most of my efforts will be directed at fathoming and elucidating Aristotle's views, rather than to their evaluation or placement in the context of contemporary debates. Hence, this book is primarily intended for specialists in ancient philosophy, especially those interested in Aristotle's psychology and theory of perception. Other scholars might wish to consult my interpretations of individual passages in Aristotle, many of which are well known and widely debated. However, I will occasionally engage in identifying parallels and dissonances between Aristotle's and contemporary theories in the philosophy of mind and psychology, so my discussion, especially in

[23] Sorabji (1972: 75–6). The list of Bennett and Hacker (2003) corresponds to that of Kahn, to which they add function (11) listed by Sorabji.

[24] Block (1960: 98–9). This view goes back to Zeller (1921: 544), and it has been advocated more recently by Van der Eijk ((ed.)1994: 50, 76; 2000: 65).

Part III, might be of some interest to readers primarily involved with contemporary theories.

Part I presents the philosophical framework within which the notion of the common sense appears. An exposition of Aristotle's programme and method will inform us how he arrives at this notion, how the common sense is related to the individual senses and other cognitive capacities, what sort of unity is at work there, and how the common sense is related to a system of bodily parts with the heart at its centre. This Part will provide us with a conceptual apparatus used in the following chapters and necessary for the success of the whole endeavour.

Part II offers a detailed treatment of all the passages in which the phrase 'common sense' occurs in Aristotle's extant works. This will show that the phrase 'common sense' occurs more often than is acknowledged in the contemporary literature, and also that it is used in different ways and for different things. One consequence of the findings in this Part is that some functions attributed to something called 'common sense' do not really belong to the common sense, but to other cognitive capacities. I will suggest what these capacities are, and how they might discharge these functions. Another consequence is that it is necessary to look at passages which do not explicitly use the phrase 'common sense' to find out what the functions of the common sense are, and how they are supposed to work.

The relevant passages are examined in detail in Part III, and each function of the common sense is explained at length. It will often be necessary to delve into Aristotle's obscure analogies, or to relate his discussions to Plato's views on particular issues, in order to get clearer about Aristotle's position. Nevertheless, these examinations will yield novel interpretations of the functions of the common sense, and I hope that at least some of these interpretations will show Aristotle's views to be sensible and interesting.